



#14

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED  
UNAVOIDABLY UNDER 37 CFR 1.137(a)**

Docket Number (Optional)

First Named Inventor: *Edlin Solomon* Art Unit: *2815*

Application Number: *09/871383*

Examiner: *Joseph Nguyen*

Filed: *05.31.2001*

Title: *Bipolar static induction transistor (variants)*

Attention: Office of Petitions  
**Mail Stop Petition**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

NOTE: If information or assistance is needed in completing this form, please contact  
Petitions Information at (703) 305-9382.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the Office notice or action plus any extensions of time actually obtained.

**APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION.**

NOTE: A grantable petition requires the following items:

- (1) Petition fee.
- (2) Reply and/or issue fee.
- (3) Terminal disclaimer with disclaimer fee-required for all utility and plant applications filed before June 8, 1995, and for all design applications; and
- (4) Adequate showing of the cause of unavoidable delay.

**1. Petition fee**

☒ Small entity - fee \$ 55 (37 CFR 1.17(l)). Applicant claims small entity status.  
See 37 CFR 1.27.

☐ Other than small entity - fee \$ \_\_\_\_\_ (37 CFR 1.17(l)).

**2. Reply and/or fee**

A. The reply and/or fee to the above-noted Office action in the form of  
Reply No. 3; Reply No. 4 (identify the type of reply):

☒ has been filed previously on 01.23.2003; 10.03.2003

☒ is enclosed herewith. Reply No. 5

B. The issue fee of \$ \_\_\_\_\_

☐ has been filed previously on \_\_\_\_\_

☐ is enclosed herewith.

[Page 1 of 3]

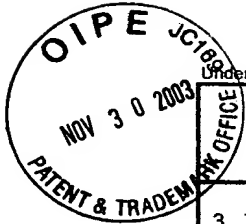
This collection of information is required by 37 CFR 1.137(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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3. Terminal disclaimer with disclaimer fee

- ☐ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ \_\_\_\_\_ for a small entity or \$ \_\_\_\_\_ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. An adequate showing of the cause of the delay, and that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition under 37 CFR 1.137(a) was unavoidable, is enclosed.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

11.30.2003

Date

*Edlin*

Signature

972-67-495-464

Telephone Number

Edlin Solomon

Typed or printed name

09/871383

Registration Number, if applicable

st. Wolfson 52/10

Address

Rishon Le Zion 75203 Israel

Address

- Enclosure ☒ Fee Payment
- ☒ Reply
- ☐ Terminal Disclaimer Form
- ☐ Additional sheets containing statements establishing unavoidable delay
- ☐ \_\_\_\_\_

**CERTIFICATE OF MAILING OR TRANSMISSION (37 CFR 1.8(a))**

- I hereby certify that this correspondence is being: express mail
- ☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to **Mail Stop Petition**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
- ☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 872-9306.

11.30.2003

Date

*Edlin*

Signature

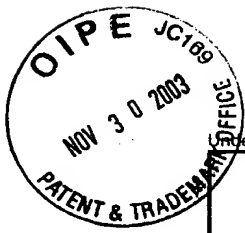
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NOTE: The following showing of the cause of unavoidable delay must be signed by all applicants or by any other party who is presenting statements concerning the cause of delay.

11.30.2003

Date

*Edlin*

Signature

09/871383

Registration Number, if applicable

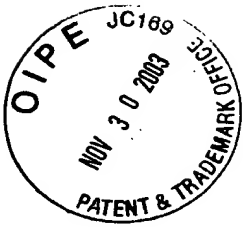
Edlin Solomon

Typed or printed name

(In the space provided below, please explain in detail the reasons for the delay in filing a proper reply.)

*It was mistake in the application.  
mistake was detected by me on 08.15.2003*

(Please attach additional sheets if additional space is needed.)



## References

1. Aoki et al. Static induction type semiconductor device. U.S. Patent No. 4994870. H01L 29/78. H01L 29/72. H01L 29/80. Priority Apr. 20. 1988.
2. Edlin S.D. JFET transistor and method for manufacturing the same. R.F. Patent No. 2102818. H01L 29/80. Priority Apr. 15. 1992.
3. Edlin S.D. The application for issue of the patent of RF No. 2000100080. A bipolar static induction transistor. H01L 29/06. Application mailed 01.05.2000.
4. Smoliansky B.A. et al. Author's certificate USSR No. 736807. H01L 29/70. Priority 01.22. 1979.
5. Aizawa Yoshiaki et al. Semiconductor device. JP Patent No. 3352840. H01L 29/78. H03K 17/56. H03K 17/68. Priority 14.03. 1994.



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5. Aizawa Yoshiaki et al. Semiconductor device. JP Patent No. 3352840. H01L 29/78. H03K 17/56. H03K 17/68. Priority 14.03. 1994.



### Abstract

The invention allows to create a transistor which can operate in both constant-voltage circuits and alternating-voltage circuits for example 120 volt and more (to some kilovolt), that is the transistor can be both closed and open with any polarity of a voltage on drain-source. It simplifies designing of many circuits and provides creating circuits which cannot be produced with any other types of transistors. Besides, the transistor has high technical characteristics: a high current density, a high switching power, a very low on-voltage. It provides applying the transistor for production, transfer and use of an electric energy. This is achieved by means of disposing elements of a bipolar static induction transistor: two gates, four sources, channels and six electrodes -- on either side of a lightly doped n-type silicon monocrystal substrate; besides one of the channels of multielement structure is thicker than the other channels; said thick channels is connected to a separate electrode.